

**Oracle® Beehive**

Beekeeper Online Help

Release 2 (2.0.1.8)

**E16651-04**

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Documentation for Oracle Beehive administrators and any other person charged with overseeing one or more aspects of an Oracle Beehive deployment.

Oracle Beehive Beekeeper Online Help, Release 2 (2.0.1.8)

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# Preface

## Audience

This document is intended for Oracle Beehive Release 2 (2.0) administrators and any other person charged with overseeing one or more aspects of an Oracle Beehive deployment.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Related Documents

For more information, see the following documents in the Oracle Beehive Release 2 (2.0) documentation library:

### Administration Guides

- *Oracle® Beehive Administrator's Guide*
- *Oracle® Beehive Administrator's Reference Guide*
- *Oracle® Beehive Integration Guide*

### Application Development

- *Oracle® Beehive Application Developer's Guide*
- *Oracle® Beehive Business Views*
- *Oracle® Beehive Java Content Repository Java API Reference*
- *Oracle® Beehive RESTful Web Services API Reference*

- *Oracle® Beehive SOAP Web Services API Reference*

### **Installation Guides**

- *Oracle® Beehive Installation Guide for Linux*
- *Oracle® Beehive Installation Guide for Microsoft Windows*
- *Oracle® Beehive Installation Guide for Oracle Solaris on SPARC (64-Bit)*
- *Oracle® Beehive Installation Help (Integrated UA)*

### **Online Helps**

- *Oracle® Beehive Central*
- *Oracle® Beehive Webmail*
- *Oracle® Beehive Standards-based Clients*
- *Oracle® Beehive Team Collaboration*
- *Oracle® Beehive Conferencing*
- *Oracle® Beehive Extensions for Outlook Supplemental Help & Release Notes*
- *Oracle® Beehive Extensions for Explorer Supplemental Help & Release Notes*
- *Oracle® Beehive Extensions for Explorer (OBEE) (Integrated UA)*
- *Oracle® Beehive Extensions for Outlook (OBEO) (Integrated UA)*

### **Mobile Devices**

- *Oracle® Beehive Using Windows Mobile Device*
- *Oracle® Beehive Using iPhone or iPad*
- *Oracle® Beehive Using BlackBerry*
- *Oracle® Beehive Registering and Configuring Mobile Devices*

### **Planning Guides**

- *Oracle® Beehive Concepts*
- *Oracle® Beehive Deployment Guide*
- *Oracle® Beehive Licensing Information*

### **Release Notes**

- *Oracle® Beehive Release Notes*

## **Conventions**

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.



### **What is Oracle Beekeeper?**

Oracle Beekeeper is a Web-based application that allows you to manage your Oracle Beehive deployment using an intuitive, user-friendly interface. Using Oracle Beekeeper, you can provision users, view your deployment topology, set role definitions, manage Oracle Beehive services, and administer many other aspects of your Oracle Beehive deployment.

### **Oracle Beekeeper and Security**

For security reasons, Oracle strongly recommends using SSL encryption in your Oracle Beekeeper installation.



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## Managing Your System

This module describes how to manage your Oracle Beehive system using Oracle Beekeeper, and includes the following sections:

- [Topology](#)
- [Managing Virus Scanning Configuration](#)
- [Managing Oracle Database Configuration](#)
- [Comparing Topology Configuration Versions](#)
- [Configuration Control](#)
- [Metrics Dashboard](#)
- [Log Viewer](#)
- [Client Applications](#)
- [Coexistence](#)
- [Records](#)
- [External Directories](#)

### Topology

The Topology module allows you to stop and start individual Oracle Beehive components, while providing you with a broad view of your deployment topology. You can review your deployment **By Topology** (with each set of component instances separated by Application tier, or **By Service** (with all instances of a given service listed together).

From the Topology module, you can also do the following:

- View the Virtual Server for a site
- Create and modify the Virus Scan Engine Cluster configuration for a site
- Manage the Database settings for your Oracle Beehive Database
- Compare topology configuration versions

To access these options, from the **Topology** pane, select the site you want to manage, and from the **View** menu, click **View Configuration**. Or, in the **By Service** tab, select the site you want to manage, and from the **View** menu, click **View Configuration**.

## Managing Virus Scanning Configuration

To access virus scan engine configuration options, from the **Topology** pane, select the site you want to manage, and from the **View** menu, click **View Configuration**. Or, in the **By Service** tab, select the site you want to manage, and from the **View** menu, click **View Configuration**.

Then, click the **Virus Scan Engine Cluster** tab.

## Creating a Virus Scan Engine Cluster Configuration

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### Notes:

- In this section, you create a configuration in Oracle Beehive that points to a virus scan engine cluster. The actual virus scan engine cluster is a system external to Oracle Beehive.
  - Virus scanning of e-mail is only enabled after you also configure virus scanning rules for the Email Service.
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1. From the **Topology** pane, select the site you want to manage, and from the **View** menu, click **View Configuration**. Or, in the **By Service** tab, select the site you want to manage, and from the **View** menu, click **View Configuration**.

Then, click the **Virus Scan Engine Cluster** tab.

2. Click **Edit**. From the **Proposed Configuration Version** window, select the **Virus Scan Engine Cluster** tab, and click the **Create Virus Scan Engine Cluster** button.
3. Optionally, enter an **Alias** for your cluster. Select a **Virus Scan Policy** from the drop down list.
4. To access additional advanced parameters, click the **Advanced** link.
5. In the **ScanEngines** section, click the plus icon to add one or more scan engines. For each scan engine, enter the **Scan Engine Host Name** and **Scan Engine Client Comm Port**, and optionally, enter an **Alias**.
6. Click **Apply** to apply your configuration changes without closing the window, or click **Save & Close** to apply your changes and close the window.

## Managing Oracle Database Configuration

The settings used by Oracle Beehive to access the Oracle Database are first set during installation of Oracle Beehive.

To access Oracle Database configuration options, from the **Topology** pane, select the site you want to manage, and from the **View** menu, click **View Configuration**. Or, in the **By Service** tab, select the site you want to manage, and from the **View** menu, click **View Configuration**.

Then, click the **Database** tab.

Expand the subsections of database configuration settings, and then click **Advanced** to see advanced settings.

To edit database connection settings, click the **Edit** button. In the **Proposed Configuration** window, click the **Database** tab.

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**Caution:** Most database configuration parameters are Advanced. If you incorrectly configure database attributes, you could cause Oracle Beehive to lose connectivity to the database, or otherwise impact the performance of Oracle Beehive.

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When you have finished making configuration changes, click **Apply** to apply your changes to the proposed configuration, or click **Save & Close** to apply your changes and close the window.

To validate and apply your configuration changes, use the [Configuration Control](#) module.

## Comparing Topology Configuration Versions

From the **Virtual Server**, **Virus Scan Engine Cluster**, or **Database** tabs, or from any component in the **Topology** viewer, you can compare current and prior configurations and proposed configurations, to see which properties may have been changed. To compare configurations:

1. Click on any component in the Topology viewer. Or, select the site you want to manage and from the **View** menu, click **View Configuration**. Or, in the **By Service** tab, select the site you want to manage, and from the **View** menu, click **View Configuration**.
2. On the **Configuration** tab, click **Compare**. The **Compare Configuration Versions** window opens.
3. Using the drop down boxes, select a **Baseline Version** and an **Other Version** to compare to it. Click **Compare**. In the lower pane, any differences between the two configuration versions are shown.
4. When you are done reviewing the changes, close the **Compare Configuration Versions** window.

## Configuration Control

The Configuration Control module allows you to verify, activate, and clear changes made to components such as sites, servers, services, and Oracle Application Server Containers for J2EE (OC4J) instances.

### Active Configuration

The currently running Oracle Beehive configuration is known as the *active configuration*.

#### To view the active configuration version:

In the **System** panel, select **Configuration**. The Configuration pane appears in the right-side of the screen. The version number is displayed in the **Active Configuration** section.

### Proposed Configuration

A saved Oracle Beehive configuration that has not yet been activated is known as the *proposed configuration*. You can view the proposed configuration version number in the **Proposed Configuration** section of the **Configuration** pane.

### Validating a Proposed Configuration

Before *activating* a proposed configuration, you must *validate* it to ensure that there are no errors.

#### To validate a proposed configuration:

1. In the **System** panel, select **Configuration**.
2. In the **Proposed Configuration** section, click **Validate**.
3. If your proposed configuration is validated, click **OK**. If the proposed configuration is not successfully validated, any management or configuration errors are displayed in a message box. You cannot activate a proposed configuration until you correct your validation errors.

### Activating a Proposed Configuration

#### To activate a proposed configuration:

1. In the **System** panel, select **Configuration**.
2. In the **Proposed Configuration** section, click **Activate**. The system will confirm that the proposed configuration was successfully activated.
3. Click **OK**.

### Deleting a Proposed Configuration

After you have deleted all proposed configurations, the proposed configuration becomes identical to the currently running configuration.

#### To delete a proposed configuration:

1. In the **System** panel, select **Configuration**.
2. In the **Proposed Configuration** section, click **Clear**. The system will confirm that all proposed configurations have been deleted.
3. Click **OK**.

## Metrics Dashboard

Using the Metrics Dashboard module, you can monitor Oracle Beehive availability, performance, and usage, for one or more services. Metrics shown on the dashboard are static; to update the values shown, click **Refresh**.

### Adding Metrics

#### To add metrics from the Metrics Dashboard:

1. From the Metrics Dashboard pane, click **New**.
2. From the **Service** pull-down menu, select an Oracle Beehive service to be monitored.
3. Select one or more metrics using the check boxes in the **Metric** list. Alternatively, select the **All** check box to add every metric for the Oracle Beehive service you have chosen.
4. In the **Scope** section, select a scope for the metrics. Alternatively, select the **All** check box to add every scope for the metrics you have chosen.

5. Click **OK**.

**To add metrics from any Service panel:**

1. From any Service or Service Instance view, click the **Metrics** tab.
2. Select one or more metrics, and click **Add**. The metrics are added to the Metrics Dashboard.

## Filtering Metrics

Using the options in the **View** menu, you can filter the main metrics view based on scope and metric type. You can also display metrics in a table view or box view.

## Removing Metrics

Once you have added a metrics group to the dashboard, from the Table view, you can remove the whole group. From the **Action** pull-down menu, select **Remove All Metrics** to clear the metrics dashboard, or, select **Remove Group** and select a metrics group to remove that group.

You can also remove individual metrics. Select one or more metrics, and from the **Action** pull-down menu, select **Remove Selected**.

## Log Viewer

The Log Viewer module allows you to search Oracle Beehive logs to monitor performance and gauge the overall stability of your Oracle Beehive installation.

## Searching for Log Entries

**To search for log entries:**

1. From the **Search** drop down list, pick **Repository** to search the log repository, or pick **FileSystem** to search log files stored in the Oracle Beehive Application tier log folder
2. If you are searching the **FileSystem**, pick values from the **Hostname** and **Beehive Home** drop down lists to determine which Oracle Beehive homes will be included in the search.

Pick one or more components from the **Component** drop down list to include logs from those components in the search.

3. Enter the search string in the **Search** field. You can perform a search using one or more of the following attributes (with the format `attribute:value`). Click the **Advanced** icon to create a complex query:
  - Date Range
  - Severity
  - Message Text
  - Message Details
  - Beehive Error Code
  - Message Group
  - Hostname

- Component ID
- Beehive Component ID
- Beehive Component Name
- Logon Record ID
- Principal ID
- Organization ID
- Module ID
- Instance ID
- Thread ID
- Process ID
- User ID
- Error Instance ID
- Execution Context ID

For more information, see [Performing Simple Searches](#).

4. With the cursor in the search box, use the Enter key to run the search. Or, from the Advanced Search menu, click **Search**.
5. Click the **Clear** icon to reset the **Log Viewer** pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Viewing Your Search Results

Using the options in the **View** menu, you can control which attributes are displayed as columns for your search results.

Clicking a column header will sort your search results by that attribute.

To view the details for a given log entry, select the entry in the **Log Viewer** window and click **Action**, and then **Open**, or double-click the log entry.

## Exporting Log Entries

You can export individual log entries in an XML format.

To export a log entry, select it in the **Log Viewer** window and click **Export**.

Alternatively, select multiple log entries while holding down **Ctrl** and click **Export**.

## Client Applications

The Client Applications module allows you to manage applications in the application repository.

Clicking **Client Applications** in the **System** pane brings up the application tree view, which lists the following details for each application:

- Name
- Vendor



- Application version
- Supported device type
- Supported operating system
- Supported processor
- Supported languages

Selecting an application brings up the detail area for the application.

Clicking + next to an application displays all versions for the selected application. Selecting an application version brings up a read-only detail area for the version.

## Filtering the Application List

Using the options in the **View** menu, you can filter items in the **Client Applications** window by type, device class, processor, or operating system. You can also choose to view all applications or only installable applications in the repository.

## Displaying Patch Set Files

Clicking + next to an application version displays all installable applications for the version. By default, the base application is always listed as patch 0 and cannot be provisioned. Dynamic installable applications are shown under the base application, while static installable applications are nested in the patch set they represent.

## Static and Dynamic Installable Applications

*A static installable application* points to a specific patch set. *A dynamic installable application* points to the latest patch set for a given application version.

## Deleting Applications, Versions, or Patch Sets

To delete an application, version, or patch set from the repository, select it in the **Client Applications** window, click **Delete**, and click **OK** to confirm the deletion. Deleting an item deletes all nested application versions and patch sets. If you want to delete an item that contains an installable application, you must manually delete the installable application before deleting the parent item.

## Uploading Applications to the Repository

**See Also:** For more information about uploading applications, see "Uploading and Provisioning a New Application" in Chapter 7, "Managing Oracle Beehive Mobility Services" of the *Oracle Beehive Administrator's Guide*.

### To upload an application to the repository:

1. From the **Actions** menu, select **Upload**.
2. Click **Browse**.
3. Select an appropriate package in .zip format and click **Open**.
4. Click **Upload**.
5. Optionally, repeat steps 2 through 4 to upload additional applications.
6. Click **Close** to return to the **Client Applications** window.

## Creating Static Installable Applications

You can create a static installable application from a selected patch-set, or from an existing static installable application. For more information, see [Static and Dynamic Installable Applications](#).

### To create a static installable application:

1. In the **Client Applications** window, select the patch-set for the desired application. Alternatively, select an existing installable application.
2. Click **New**.
3. Enter a name for the installable application in the **Installable Name** field.
4. Click **Yes**.

## Creating Dynamic Installable Applications

You can create a dynamic installable application when an application version is selected and no dynamic installable application exists for the selected version. For more information, see [Static and Dynamic Installable Applications](#).

### To create a dynamic installable application:

1. In the **Client Applications** window, select an application version for which no dynamic installable application currently exists.
2. Click **New**.
3. Enter a name for the installable application in the **Installable Name** field.
4. Click **Yes**.

## Provisioning Installable Applications

You can provision installable applications for organizations within your enterprise or your entire enterprise.

### To provision an installable application:

1. In the **Client Applications** window, select the installable application.
2. Click the **Provisioning** tab.
3. Click **Add**.
4. To provision the installable application for your entire enterprise, select your enterprise from the list and click **>**. Alternatively, select your enterprise, click the **View Organizations** icon, select an organization from the list, and click **>**.
5. Click **Add**.
6. Click **Apply** to save your changes.

## Coexistence

To implement the Oracle Beehive coexistence solution, you must add and configure coexistence connectors based on the requirements of your deployment. Typically, there is one connector between each Oracle Beehive server and Microsoft Exchange Server routing group.

## Records

The Records module allows you to set or modify the settings for Oracle Universal Records Management (Oracle URM), to enable Records Management in Oracle Beehive.

From the **Records** pane, you can view the URM Adapter's status in the **Adapter Status** box. Click **Refresh** to refresh the Adapter Status.

From the **URM Adapter Settings** box, you can view or modify the current connection settings for the URM Adapter. Click the **Create** button to add a new URM Adapter.

You can modify parameters for the URM Agent in the **URM Agent Settings** box. Enter new values, and then click **Apply** to apply your changes.

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**Note:** Oracle URM is a separate product not included with Oracle Beehive. For more information about using Records Management with Oracle Beehive, see "Managing Records Management" in Chapter 6, "Managing Oracle Beehive Workspaces" of the *Oracle Beehive Administrator's Guide*.

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## External Directories

You can configure the User Directory Service (UDS) for integration with supported external user directory servers. You can also configure the Authentication Service to leverage the same external user directories for authentication attributes such as user names and passwords.

For each external user directory, you must create a directory profile. You can have multiple profiles, if your deployment includes multiple LDAP-based server hosts, but only one profile can be set to **Default** and **Active**. Additional profiles can be set to Active, but they will not be in effect. Only one profile can be flagged as **Default**.

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**Caution:** If you are using an external user directory, you cannot use Oracle Beehive to create users directly. When you set up an external user directory, any existing users you have created directly in Oracle Beehive will be deleted.

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**See Also:** For more information, consult the "Integrating and Synchronizing LDAP with Oracle Beehive" module of the *Oracle Beehive Installation Guide*.

## Creating a Directory Profile

To synchronize with a remote LDAP-based user directory, you must create a directory profile.

1. From the **System** menu, click **External Directories**. From the **External Directories** pane, click **Edit**.
2. From the External Directories **Edit** window, click **New**.
3. In the **New Directory Profile** window, enter information about your external directory:
  - Give the profile a **Profile Name**
  - Select the **Directory Type**

- Optionally, enter a **Primary Authentication Attribute**

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**Note:** The **Primary Authentication Attribute** is mandatory when the **Default** check box is checked.

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- Enter a **User Search Base**
- Enter a **Server Host**, **Server Port**, **User Name**, and **User Password**, which Oracle Beehive will use to access your remote directory. Enter the password again in the **Confirm Password** field. Check the **Use secure connection** check box to use an encrypted protocol to connect to the indicated port.
- Optionally, enter a **Group Search Base**
- Optionally, enter a **Polling Interval** (in seconds).
- Check the **Default** box if this directory profile will be the default directory profile for your enterprise.
- Check the **Enable** check box to enable this directory profile once it is created.

Click **Next**.

4. On the **Rulesets** page, configure the following:
  - a. In **Scope and Membership Ruleset**, click **Configure**. On the **Scope Ruleset** table, click **Add** to add rows. Type the name of a level of scope in the source directory, and then enter a **Value** to map it to an Oracle Beehive level of scope. When a scope rule is added, you may optionally add membership rules corresponding to the scope rule. Click **Apply** when you are done adding rows.
  - b. In **User Type Ruleset**, click **Configure**. On the **User Type Ruleset** table, click **Add** to add rows. Set the **Source Field** to a field in the source directory, set the **Value** to the value of that field that maps to an Oracle Beehive user type, and then use the drop down list to map it to an Oracle Beehive user type. Click **Apply** when you are done adding rows.
  - c. In **Group Type Ruleset**, click **Configure**. On the **Group Type Ruleset** table, click **Add** to add rows. Set the **Source Field** to a field in the source directory, and set the **Value** to a value that corresponds to a static group in Oracle Beehive. Click **Apply** when you are done adding rows.

Click **Next**.

5. On the **Mapping** page, configure the following:
  - a. In **Enterprise User Attributes Mapping**, click **Configure**. On the **Enterprise User Mapping** table, the default mappings for your directory type have already been added. Click **Add** to add rows. Enter a **Source Attribute** from your external directory, select a **Beehive Attribute** from the drop down list, select an attribute type, and, where applicable, select an attribute subtype or an OraPostal type. Click **Apply** when you are done adding rows.
  - b. In **Extended Enterprise User Attributes Mapping**, click **Configure**. On the **Extended Enterprise User Mapping** table, the default mappings for your directory type have already been added. Click **Add** to add rows. Enter a **Source Attribute** from your external directory, select a **Beehive Attribute** from the drop down list, select an attribute type, and, where applicable, select an attribute subtype or an OraPostal type. Click **Apply** when you are done adding rows.

- c. In **External Person Attributes Mapping**, click **Configure**. On the **External Person Mapping** table, the default mappings for your directory type have already been added. Click **Add** to add rows. Enter a **Source Attribute** from your external directory, select a **Beehive Attribute** from the drop down list, select an attribute type, and, where applicable, select an attribute subtype or an OraPostal type. Click **Apply** when you are done adding rows.
  - d. In **Static Group Attributes Mapping**, click **Configure**. On the **Static Group Mapping** table, the default mappings for your directory type have already been added. Click **Add** to add rows. Enter a **Source Attribute** from your external directory, select a **Beehive Attribute** from the drop down list, select an attribute type, and, where applicable, select an attribute subtype or an OraPostal type. Click **Apply** when you are done adding rows.
6. Click **Finish** to create the directory profile.



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## Managing Enterprises

This module contains describes how to manage Oracle Beehive enterprises using Oracle Beekeeper, and includes the following sections:

- [About Entities, Actors, and Artifacts](#)
- [Managing Workspace Quotas](#)
- [Searching in Oracle Beekeeper](#)
- [Managing Users](#)
- [Managing Groups](#)
- [Managing Resources](#)
- [Managing Devices](#)
- [Managing Policies](#)
- [Managing Roles](#)
- [Managing Categories](#)
- [Managing Audit](#)
- [Managing Remote Repositories](#)

### About Entities, Actors, and Artifacts

- An *entity* is an object in Oracle Beehive, such as a service, user, workspace, or artifact. In essence, every object in Oracle Beehive is an entity.
- An *actor* is an entity, such as a user, group, or service, that acts upon other entities.
- An *artifact* is a type of entity that users can view, create, modify, or delete. Artifacts are the results of communications and other collaborative activities, and include e-mail messages, meeting entries, online discussions, and documents.

### Managing Workspace Quotas

You can control the maximum disk space allowed for workspaces in your enterprise.

**To manage workspace quotas for your entire enterprise:**

1. From the **Enterprises** panel, click **Manage Enterprises**.
2. In the **Manage Enterprises** window, select your enterprise.

3. Click the **Quota Settings** tab.
4. Set specific quota limits for each type of quota. By default, each quota type is set to **Unlimited**.
  - **Hard Quota**: Set the total disk space allocated to your enterprise.
  - **Sub-Organizations Hard Quota**: Set the default disk space allocated to each sub-organization within your enterprise.
  - **Team Workspace Hard Quota**: Set the default disk space allocated to each team workspace within your enterprise.
  - **Personal Workspace Hard Quota**: Set the default disk space allocated to each personal workspace within your enterprise.
  - **Team Workspace Soft Quota**: Set the default quota level at which a warning event is created for each team workspace within your enterprise.
  - **Personal Workspace Soft Quota**: Set the default quota level at which a warning event is created for each personal workspace within your enterprise.
5. Click **Apply** to save your changes to the quota settings. Alternatively, click **Reset** to discard your changes.

**To manage quota for a single workspace:**

1. From the **Enterprises** panel, click the name of your enterprise.
2. In the **Manage Enterprises** window, select a workspace.
3. Click the **Quota Settings** tab.
4. Set specific limits for hard and soft quotas. By default, each quota type is set to **Unlimited**.
5. Click **Apply** to save your changes to the quota settings. Alternatively, click **Reset** to discard your changes.

## Searching in Oracle Beekeeper

You can enter search strings in the **Search** field in the top-right corner of the main window to search for entities in Oracle Beekeeper. Alternatively, you can use the **Advanced Search** dialog box to perform searches.

Searches in Oracle Beekeeper are not case-sensitive.

### Performing Simple Searches

In its most basic form, a search consists of an attribute, a keyword, and a match operator. An attribute is the criterion by which you intend to search for one or more Oracle Beehive entities. A keyword is the value for which you want to search. Generally, the match operator is **:**, which instructs Oracle Beekeeper to return all results for the searched attribute containing the given keyword.

You perform a simple search by entering search strings in the **Search** field and clicking the **Search** icon to begin your search.



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**Examples:** To perform a search for all users with the word 'developer' in their job titles, you would enter `title:developer` in the **Search** field. Alternatively, to search for all members of the accounting department, you would enter `department:accounting` in the **Search** field.

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### Complex Search Syntax

Oracle Beekeeper supports boolean expressions, nested predicates with parentheses, and the predefined attributes `ANY` and `ALL`.

- Using the `ANY` attribute matches the keyword or keyphrase against *any* of the relevant search attributes.
- Using the `ALL` attribute matches the keyword or keyphrase against *all* of the relevant search attributes.

If you want to specify multiple keywords for a given search, you must enclose them in double quotation marks. Multiple keywords in double quotation marks constitute a *keyphrase*.

Boolean Operator	Oracle Beekeeper Symbol
contains	:
AND	&&
OR	
NOT	!

#### Example 3-1 Complex Syntax

In the **Search** field, enter the following text:

```
(givenname:john && familyname:coetzee) || (givenname:jamaica && familyname:kincaid)
```

Your search would return the following results:

- Any user whose given name was John *and* whose family name was Coetzee
- Any user whose given name was Jamaica *and* whose family name was Kincaid

## Performing Advanced Searches

### To perform an advanced search:

1. Click the **Advanced Search** icon to launch the **Advanced Search** dialog box.
2. From the **Add** pull-down menu, select an attribute and click **+**.
3. Enter a word or part of a word in the field provided. To search for entities with an attribute containing the word you entered, select **contains** from the attribute's pull-down menu. Alternatively, to search for entities with an attribute that does not contain the word you entered, select **does not contain** from the attribute's pull-down menu.
4. Optionally, repeat steps 2 and 3 to search for entities using more than one attribute.
5. If you are searching using multiple attributes, select **All** to ensure that your search returns only entities that match all the attributes by which you are searching.

Alternatively, select **Any** to ensure that your search returns entities that match any of the attributes by which you are searching.

6. If you want to delete any attribute search you have created, click x next to the attribute field.
7. Click **Search**. Your results are displayed in the main window behind the **Advanced Search** dialog box.
8. Click **Close** to return to the main window.

## Managing Users

A user, also referred to as an actor, is an entity that can act on other entities. Users can be assigned to groups, provisioned for services, and authorized to perform tasks and services.

All users are part of the enterprise directory, which is managed by the User Directory Service (UDS).

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**Note:** If you have configured Oracle Beehive to use an external directory server, you cannot create or modify users using Oracle Beekeeper.

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## Creating Users

### To create a user:

1. In the **Enterprises** panel, expand the **Manage Enterprises** navigation tree.
2. Click **Users**.
3. From the menu bar, click **New**.
4. Click one of the tabs and enter user information:
  - **General:** Enter basic information such as first name and family name, time zone, user name, and password. You must provide a family name and a user name for the user.
  - **Business:** Enter official information such as company, organization, department, job title, and manager.
  - **Contact Info:** Enter contact information such as e-mail, phone, fax, and instant message address. You can also add or remove entries for each type of contact information using the + and x buttons. You can also select a primary entry from among the multiple entries for each contact information field, and categorize each contact information field under the **Business**, **Personal**, or **Other** category.
  - **Groups:** Lists the group or groups to which a user belongs. To add the user to a group, click **Add**, enter a name or part of a name in the **Search** field, and click the search icon to return a list of groups. Select a group from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple groups, and click **Add**. For more information, see [Managing Groups](#).
  - **Roles:** Lists the role or roles assigned to the user. To assign a role to the user, click **Add**. Select a role from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple roles, and click **Add**. For more information, see [Managing Roles](#).

5. Click **Save & Close** to create the user and close the **New User** dialog box. Alternatively, click **Apply** to create the user without closing the dialog box.

## Modifying Users

### To modify information about a user:

1. In the **Enterprises** panel, expand the **Manage Enterprises** navigation tree.
2. Click **Users**.
3. From the displayed list of users, select the user you want to modify.
4. From the menu bar, select **Actions**, then **Open**.
5. Update any or all user information. For more information, see [Creating Users](#).
6. Click **Save & Close** to save your changes and close the dialog box. Alternatively, click **Apply** to save your changes without closing the dialog box.

## Disabling User Subscription Notifications

You can disable all subscription notifications for a user using Oracle Beekeeper.

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**Note:** Users can enable and disable their own notifications (including after you disable them) using Oracle Beehive Central.

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### To disable notifications for one or more users:

1. In the **Enterprises** panel, expand the **Manage Enterprises** navigation tree.
2. Click **Users**.
3. From the displayed list of users, select the user you want to modify.
4. From the menu bar, select **Actions**, then **Disable subscriptions**. After you confirm the action, all notifications for that user will be disabled.

## Deleting Users

### To delete a user:

1. In the **Enterprises** panel, expand the **Manage Enterprises** navigation tree.
2. Click **Users**.
3. From the displayed list of users, select the user you want to delete.
4. Click **Delete**.
5. Click **Yes** to confirm the deletion.

## Searching for Users

### To search for one or more users:

1. In the **Users** pane, enter the search string in the **Search** field. You can perform a search using one or more of the following attributes:
  - Status
  - FamilyName

- GivenName
- MiddleName
- Nickname
- Email
- Title
- Office
- Department
- Company
- Profession
- Manager
- Organization
- TimeZone

For more information, see [Performing Simple Searches](#).

2. Click the **Search** icon.
3. Click x to reset the **Users** pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Managing Groups

An Oracle Beehive group is a defined collection of users or resources (or some combination thereof) that are related based on a line of business, a project, or another common association.

### About Groups

Oracle Beehive provides the following group types:

- **Static groups** have explicit member lists. You must manually add and remove members from static groups.
- **Dynamic groups** have memberships defined by a query, so that users fitting whatever criteria is being queried are automatically made members. Dynamic group queries are based on any combination of user attributes, properties, or addresses.

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**Example:** All users with a particular manager could belong to a dynamic group defined by a query against the **Manager** attribute of user accounts. Whenever a user's manager attribute is changed to that particular manager, that user is automatically added to the group. Likewise, whenever a user's manager attribute changes (the user switches to a different manager), that user is automatically removed from the group.

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## Creating Static Groups

### To create a static group:

1. From the **New** pull-down menu, select **Static Group**. The **New Static Group** pop-up will open in a separate window.
2. On the **General** tab, enter a unique name for the group. Optionally, enter a brief group description.
3. Optionally, click the **Contact Info** tab and provide contact information for the group.
4. Click the **Members** tab.
5. Click **+**.
6. Enter a name or part of a name in the **Search** field and click the search icon to return a list of results.
7. Select a user from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple users, and click **Add**.
8. Click **Save & Close** to create the static group.

## Creating Dynamic Groups

### To create a dynamic group:

1. From the **New** pull-down menu, select **Dynamic Group**. The **New Dynamic Group** pop-up will open in a separate window.
2. On the **General** tab, enter a unique name for the group. Optionally, enter a brief group description.
3. In the **Query** section, select one or more attributes to define your membership, and provide a value and operator for each attribute you choose. You can add members using any of the following attributes:
  - Family name
  - Given name
  - Middle name
  - Nickname
  - E-mail address
  - Title
  - Office
  - Department
  - Company
  - Profession
  - Manager
  - Type (Enterprise or Extended Enterprise)

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**Example:** You create a dynamic group intended to comprise only the accountants in your Montreal office. From the **Add** pull-down menu, you select **Office** and click **+**. Leaving the operator at **contains**, you enter **Montreal** in the edit box. From the **Add** pull-down menu, you select **Profession** and click **+**. Leaving the operator at **contains**, you enter **accountant** in the edit box. You click the **All** radio button to ensure that your group only contains users who meet both your search criteria.

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4. Click **Preview** to verify that your query has generated the desired membership for this group.
5. Optionally, click the **Contact Info** tab and provide contact information for the group.
6. Optionally, you can manually add members to a dynamic group by performing the following steps:
  - a. Click the **Include** tab.
  - b. Click **Add**.
  - c. Enter a name or part of a name in the **Search** field and click the search icon to return a list of results.
  - d. Select a user from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple users, and click **Add**.
7. Optionally, you can make specific roles available to group members by performing the following steps:
  - a. Click the **Roles** tab.
  - b. Click **Add**.
  - c. Leave the **Search** field blank and click the search icon to return a list of all available roles.
  - d. Select a role from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple roles, and click **Add**.
8. Click **Save & Close** to create the dynamic group.

## Searching for Groups

### To search for one or more groups:

1. In the **Groups** pane, enter the search string in the **Search** field. You can perform a search using one or more of the following attributes:
  - Name
  - Description
  - Status

For more information, see [Performing Simple Searches](#).
2. Click the **Search** icon.
3. Click **x** to reset the **Groups** pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Changing Group Ownership

### To change the owner of a group:

1. In the **Groups** pane, select the group you want to modify. You can edit the group in the lower pane, or click **Open** from the **Action** menu to open the group in a separate window.
2. On the **General** tab, next to the name of the **Owner**, click the **Pick User** icon to pick a new user to be the owner of the group, or, click the **Pick Group** icon to pick a new group to be the owner of this group. Use the picker to select a new owner.
3. From the lower pane, click **Apply** to apply your changes to the group. If you are modifying the group from a separate window, click **Apply** to apply your changes without closing the window, or click **Save & Close** to apply your changes and close the window.

## Managing Resources

A resource is an entity that users can search for, reserve, and use for a specified period of time, such as a conference room or a projector.

### Creating Resources

#### To create a resource:

1. From the **New** menu, click **Bookable Resource** or **External Resource**.
2. On the **General** tab:
  - Enter a unique **Name** for the resource.
  - Optionally, specify a **Capacity** for the resource. For example, a small conference room could have a capacity of 10.
  - By default, the scope for the resource is your enterprise. Click the **Pick a scope** icon to select a different scope for the resource.
  - Select a **Type** for the resource: **Room**, **Equipment**, or **Other**.
  - In the **Email** field, an e-mail address is suggested based on the name entered in the **Name** field. Optionally, edit the value to a different e-mail address.
  - Optionally, enter a location, description, phone number, fax number, and URL for the resource.
  - Optionally, for bookable resources, click the **Select a category** icon to pick a **Category** for the resource. Check the **Require external processing** check box if the resource requires processing outside Oracle Beehive to book.
  - Optionally, click the **Select a Time Zone** icon to pick a **Time Zone** for the resource
  - Optionally, provide any special information related to booking this resource in the **Booking Info** field.
3. Optionally, assign individual approvers to a bookable resource by performing the following steps:

- a. Click the **Approvers** tab.
- b. Click **Add** to add an approver. Enter the full name or part of the name of an Oracle Beehive user in the field and click the magnifying glass to obtain a list of results.
- c. Select a one or more users, and click the plus icon. The users now appear in the **Approvers** list.
4. Optionally, select working hours for a bookable resource by performing the following steps:
  - a. Click the **Working Hours** tab.
  - b. Click **Add** to add a schedule. Select a **Start Day** and **Start Time**, and an **End Day** and **End time**, for the resource to be available. Select a Type, either **Regular** or **Extended**.
  - c. In the **Schedule** drop down, you can select **Alternating Weeks** to create a schedule that alternates from one week to the next.
5. Optionally, set up access control for a bookable resource, to allow or prevent some users from seeing the resource, by performing the following steps:
  - a. Click the **Access Control** tab. By default, the Everyone group has Allowed access.
  - b. Click **Add** to add a user or group to the list. Search for and select one or more users and groups, and click the plus icon to add them to the list.
  - c. Use the drop down list to select **Allowed** or **Denied** to allow or deny access to the resource for that user or group.
6. Click **Apply** to apply your changes without closing the window, or click **Save & Close** to apply your changes and close the window.

## Searching for Resources

### To search for one or more resources:

1. In the **Resources** pane, enter the search string in the **Search** field. You can perform a search using one or more of the following attributes:
  - Name
  - ID
  - Capacity
  - Email
  - Type
  - Is External
  - Modified On

For more information, see [Performing Simple Searches](#).
2. Click **Search**.
3. Click **Clear** to reset the **Resources** pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).



## Managing Devices

### Uploading Device Profiles

**See Also:** For more information about uploading device profiles, see "Uploading a Device Profile File" in Chapter 7, "Managing Oracle Beehive Mobility Services," in the *Oracle Beehive Administrator's Guide*.

**To upload a new device profile to Oracle Beehive:**

1. From the **Actions** menu, select **Upload Profile**.
2. Click **Browse**.
3. Select a valid device profile in XML format and click **Open**.
4. Click **Upload**.
5. Click **Close** to exit the **Upload File** dialog box.

### Viewing, Modifying, and Deleting Device Profiles

**To modify a device profile:**

1. From the **Actions** menu, select **Open**.
2. Click + next to any of the sections.
3. To modify a parameter, edit the value in the appropriate **Value** box.
4. Click **Apply** to apply your changes, or **Reset** to erase your changes.

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**Note:** The device capabilities that appear when you click the **Capabilities** tab are read-only and cannot be modified.

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**To delete a device profile:**

1. Select a profile.
2. From the **Actions** menu, select **Delete**.

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**Note:** You can only delete profiles without associated device types.

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### Filtering Profiles

You can filter the list of device profiles displayed in the main window by entering filter criteria in the **Filter by** field and clicking the magnifying glass. You can filter profiles by name or by the **Modified On** date. Clicking **X** next to the **Filter by** field resets the filter criteria and reloads the profile window with no filter criteria.

### Viewing Device Types for a Profile

**To view all associated device types for a profile:**

1. Select a profile.
2. From the **View** menu, select **Types**.

## Listing Devices Types

Click the **Types** tab to list all available device types in the system and display associated information for each device type:

- Name
- Manufacturer
- Model
- Dev Inf DTD Version: Displays the Document Type Definition (DTD) version used to exchange information between the device and the Oracle Beehive server.
- Software Version: Lists the device's OS version.
- Device Class: Lists the class of the device. Device classes include PDA, pager, and mobile.
- OS: Lists the operating system that can run on the device.
- Processor

## Creating a Device Type

**To create a device type:**

1. Click **New** to bring up the **New Device Type** window.
2. Select a profile from the **Device Profile** pull-down menu.
3. Enter a manufacturer, model, device class, OS, and processor for the device type. If you specify a manufacturer and model, you do not need to provide the device class, OS, and processor. If you provide the device class, OS, and processor, you do not need to specify the manufacturer and model.
4. Optionally, enter the software version and DTD version for the device type. For more information, see [Listing Devices Types](#).
5. Click **Save & Close** to create the device type and close the **New Device Type** window. Alternatively, click **Apply** to create the device type without closing the window.

## Viewing and Modifying Device Types

To view a device type, select it in the main window. Details are displayed in a pane below the main window.

**To modify a device type:**

1. Click the **Types** tab.
2. Select a device type.
3. Modify any of the properties for the device type.
4. Click **Apply** to save your changes to the device type. Alternatively, click **Reset** to discard your changes.

## Deleting Device Types

To delete a device type, select one or more device types and select **Delete** from the **Actions** menu. You will be prompted to confirm the deletion or deletions.

## Searching for Device Types

You can search the system for device types.

### To search for device types:

1. In the **Devices** pane, click the **Types** tab. For more information, see [Listing Devices Types](#).
2. Enter a search string in the **Search** field. For more information, see [Performing Simple Searches](#).
3. Click **Search**.
4. Click **Clear** to reset the **Devices** pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Listing Devices

### To list all devices registered in Oracle Beehive:

1. From the **Manage Enterprises** section in the left-hand pane, click **Devices**.
2. Click the **Devices** tab. To view details for a device, select it. Information for the selected device appears in the details pane.

## Queuing Device Commands

You can queue different device commands to be performed at a later date.

### To queue a command for a device:

1. From the **Manage Enterprises** section in the left-hand pane, click **Devices**.
2. Click the **Devices** tab.
3. Click the **Commands** tab.
4. Select the device.
5. From the **Actions** menu, select one of the following commands:
  - **Check for Updates:** Use this command to query the server for any application updates.
  - **Upload Log:** Use this command to upload device logs created by the installed applications to the server.
  - **Upload Config:** Use this command to upload an inventory of all installed applications and their respective configurations to the server.
  - **Wipeout:** Use this command to erase all applications and data from the selected device.

## Deleting Device Commands

You can delete device commands from the queue at any time. You may want to delete device commands for one of the following reasons:

- The device is not available.
- The user is not currently accepting the queued command.

- You have queued another command with the Wipeout command pending and no longer want the command to be executed.

**To delete a device command from the queue:**

1. From the **Manage Enterprises** section in the left-hand pane, click **Devices**.
2. Click the **Devices** tab.
3. Click the **Commands** tab.
4. Select the device.
5. Select the queued command and click **Delete**.

## Managing Policies

Policies establish rules for how the system should behave when certain events occur, based on evaluating the truth of a set of conditions, and then allowing or disallowing a resulting action.

Each policy is triggered by events.

A policy has one or more rules, each of which is triggered by one event.

Each rule contains one or more conditions, which are evaluated as true or false.

Each rule may activate an action, depending on the results of the evaluated conditions.

For more detailed information about policies, see the "Managing Oracle Beehive Events, and Policies" module of the *Oracle Beehive Administrator's Guide*.

To access the main Policies view, click **Policies** in the **Enterprise** panel.

## Listing Existing Policies

You can list the existing policies by clicking the **Policies** tab in the main Policies view. Each policy is listed by name, along with a description and an indication of whether the policy is currently enabled.

You can sort the list of policies by name.

You can restrict the view to one type of policy. From the Type drop down:

- Select **All** to show all policies
- Select **General** to show all non-record, non-audit policies
- Select **Record** to show only record management policies
- Select **Audit** to show only audit policies

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**Note:** If you do not have sufficient privileges, you cannot view audit policies.

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## Viewing Details of an Existing Policy

You can review the details of an existing policy. Click a policy from the list of existing policies. Details of the policy are shown in the lower pane.

The following information is shown on the **General** tab:

- The **Name** of the policy

- If a **Template** was used when creating this policy, that template's name is shown
- If the policy is currently enabled, the **Enabled** check box is checked
- A **Description** of the policy
- The date and actor associated with the policy creation, and the date and actor associated with the last modification of the policy

To view the rules included in the policy, click the **Rules** tab.

Click a rule to view information about that rule. The following information is shown:

- On the **General** tab:
  - The **Name** of the rule
  - The rule's **Priority**; rules are evaluated from lowest to highest integer value of priority
  - The **Event** which triggers this rule
  - The **Action** to be performed if the event occurs
  - A **Description** of the rule
- On the **Conditions** tab:
  - One or more conditions may be shown. If there are conditions, the conditions must be met for the action shown on the **General** tab to be triggered
- On the **Attributes** tab:
  - One or more attributes may be shown. Each attribute has a name and value
- On the **Action Parameters** tab:
  - One or more Action Parameters may be listed. Each Action Parameter has a name and description

## Creating a New Policy

### To create a policy from a template:

1. From the main Policy view, click the **New** button
2. From the drop down, select **Policy From Template**
3. In the **New Policy** window, enter a name and description for the new policy.  
You must also select a template on which to base this policy; click a template from the list, and its name will be added to the **Template** field.  
Click **Next** to continue
4. Pick one or more rule templates and add them to the **Rules** column. Click **Next** to continue
5. Optionally, enter attribute values for each rule you added to the policy. You can use the search tool to pick from users, groups, or containers. Click **Finish** to create the policy.

### To create a policy without using a template:

1. From the main Policy view, click the **New** button
2. From the drop down, select **Policy**

3. In the **New Policy** window, enter a name and description for the new policy.  
 You can choose a **Type**: use **Audit** for audit policies, **Record** for records management policies, and **General** for all other types of policies.  
 Click **Next** to continue
4. Click the **Rules** tab
5. You must add one or more rules to a policy. Click the **Add** button to add a new rule. For each new rule, on the New Rule **General** tab:
  - Enter a **Name** and (optionally) a **Description** for the rule
  - Select a **Priority** for the rule. Rules will be evaluated in order of priority, from the lowest to the highest.
  - Select an **Event** which will trigger this rule, by clicking the search icon and picking an event from the list
  - Select an **Action** to be triggered when the Event occurs, by clicking the search icon and picking an action from the list

For each new rule, on the New Rule **Conditions** tab, you may optionally add one or more conditions to the rule:

- a. Click **Add** to add a new condition
- b. Select whether the condition on the left side of the function will be a **Function** or an **Attribute** from the first drop-down box
- c. Enter a value on the left side of the equation, or click the list icon to select an attribute from a list
- d. Select an operator from the center drop-down list
- e. Select whether the condition on the right side of the function will be a Function or an Attribute from the second drop-down box
- f. Enter a value on the right side of the equation, or click the list icon to select an attribute from a list
- g. Click **View** to review the condition. While viewing, click **Edit** to edit the condition.
- h. Click the **AND** or **OR** icons to create a compound condition
- i. Click the **Delete** icon next to any condition row to delete that row. If there is only one condition row, click **Remove** to delete the entire condition

For each new rule, on the New Rule **Action Parameters** tab, you may optionally add one or more action parameters to the rule:

- a. Click **Add** to add a new action parameter
  - b. Enter a name and a value for the new action parameter
6. Click **Apply** to save your policy but keep the window open for further changes, or click **Save and Close** to save your policy and close the New Policy window

## Modifying a Policy

### To modify a policy:

1. From the Policies pane, click a policy in the list

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**Note:** You can edit an existing policy in the lower pane, or, if you prefer, select the policy and choose **Open** from the **Action** drop-down list to edit the policy in a separate window.

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2. On the **General** tab, you can change the name and description of the policy, and you can enable or disable the policy by clicking the **Enabled** check box
3. On the **Rules** tab, you can edit existing rules. Click the rule, and then make changes to it. Click the **Add** button to add a new rule. For each rule, on the **Rule General** tab:
  - a. Enter or modify the **Name** and **Description** for the rule
  - b. Select or modify the **Priority** for the rule. Rules will be evaluated in order of priority, from the lowest to the highest.

For each new or existing rule, on the **Rule Conditions** tab, you may add or modify conditions for the rule:

- a. Click **Add** to add a new condition, or click **Edit** to edit the existing condition
- b. Select whether the condition on the left side of the function will be a **Function** or an **Attribute** from the first drop-down box
- c. Enter a value on the left side of the equation, or click the list icon to select an attribute from a list
- d. Select an operator from the center drop-down list
- e. Select whether the condition on the right side of the function will be a **Function** or an **Attribute** from the second drop-down box
- f. Enter a value on the right side of the equation, or click the list icon to select an attribute from a list
- g. Click **View** to review the condition. While viewing, click **Edit** to edit the condition.
- h. Click the **AND** or **OR** icons to create a compound condition
- i. Click the **Delete** icon next to any condition row to delete that row. If there is only one condition row, click **Remove** to delete the entire condition

For each new or existing rule, on the **Rule Action Parameters** tab, you may add or modify one or more action parameters to the rule:

- a. Click **Add** to add a new action parameter, or click an existing action parameter to select it
  - b. Enter or modify a name and a value for each new or existing action parameter
4. Click **Apply** to save the changes you have made to the existing policy, or click **Reset** to revert to the previously saved version of the policy. Clicking **Reset** will remove any changes you have made so far to the policy

## Deleting Policies

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**Caution:** You should not delete the default policies, as they are required for various Oracle Beehive functions to work properly. The default policies include the Audit Records Management policy, the Validate Password policy, the User Provisioning policy, and the User Deprovisioning policy. If you need to disable any of these policies, you can edit the policy, and de-select the **Enabled** check box.

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### To delete an existing policy:

1. From the Policies pane, click an existing policy
2. Click **Delete** or choose **Delete** from the **Action** drop-down list to delete the policy
3. On the confirmation dialog box, click **OK** to confirm deletion of the policy

## Viewing Policy Templates

You can use policy templates when creating new policies to conveniently select from events related to a particular subject. To review the available policy templates, from the **Policies** pane, click the **Templates** tab. Each policy template is listed, along with a description.

Click a policy template to display information about that policy template. In the lower pane, the general and rule templates information is available.

With a policy template selected, you can click **Policy From Template** from the **New** drop down to create a new policy based on that template. Then, follow the steps described in "[Creating a New Policy](#)".

## Creating New Policy Templates

You can create a new policy template, based on a policy schema. Oracle Beehive comes with two default schemas: the Audit schema and the Records Management schema.

1. From the **Policies** pane, click the **Templates** tab, and then select **Template From Schema** from the **New** drop down. Or, from the **Policies** pane, click the **Schemas** tab, select a schema, and then click **Template From Schema**.
2. In the **New Template** dialog box, enter a name and (optionally) a description for the new policy template. If you started from the Templates tab, also pick a schema on which to base this template. Click **Next**.
3. Select one or more Rule Definitions from which rule templates should be created, by moving them into the Rule Templates column. Click **Next**.
4. For each rule definition, you can edit the attribute template. You can set attributes to be editable or non-editable, mandatory or optional, and whether to prompt users for a value. You can enter a default value, create a list of one or more allowed values, and (for some attributes) indicate that the attribute can have more than one value.

When you are finished editing attribute templates, click **Finish** to create the new policy template.



## Viewing Policy Schemas

You can use policy schemas when creating new policy templates to make use of pre-defined rule and attribute definitions. To review the available policy schemas, from the **Policies** pane, click the **Schemas** tab. Each policy schema is listed, along with a description.

Click a policy schema to display information about that policy schema. In the lower pane, the general and rule definitions information is available.

With a policy schema selected, you can click **Template From Schema** from the **New** drop down to create a new policy template based on that schema. Then, follow the steps described in "[Creating New Policy Templates](#)".

## Creating New Policy Schemas

To create a new policy schema, perform the following steps:

1. From the **Policies** pane, click the **Schemas** tab. Then, click **New**, and select **Schema**.
2. In the **New Schema** window, enter a **Name** and (optionally) a **Description** for the new schema. From the **Type** drop down, pick **Audit** to create a new audit schema, **Record** to create a new record management schema, or **General** for all other schema types.

By default, a new default policy template will be created from your new policy schema. Uncheck the box to disable this behavior.

3. Click the **Rule Definitions** tab to create one or more rule definitions for this schema. Click **Add**. Then, in the **New Rule Definition** section, enter information about your new rule. On the **General** tab, give the rule a **Name** and (optionally) a **Description**. Select an **Event** using the event picker, and then an **Action** for that event using the action picker.
4. For each new rule, on the **Rule Conditions** tab, you may add conditions for the rule:
  - a. Click **Add** to add a new condition, or click **Edit** to edit an existing condition
  - b. Select whether the condition on the left side of the function will be a **Function** or an **Attribute** from the first drop-down box
  - c. Enter a value on the left side of the equation, or click the list icon to select an attribute from a list
  - d. Select an operator from the center drop-down list
  - e. Select whether the condition on the right side of the function will be a **Function** or an **Attribute** from the second drop-down box
  - f. Enter a value on the right side of the equation, or click the list icon to select an attribute from a list
  - g. Click **View** to review the condition. While viewing, click **Edit** to edit the condition.
  - h. Click the **AND** or **OR** icons to create a compound condition
  - i. Click the **Delete** icon next to any condition row to delete that row. If there is only one condition row, click **Remove** to delete the entire condition
5. For each rule, on the **rule Attribute Definitions** tab, you may add or modify one or more attribute definitions to the rule:

- a. Click **Add** to add a new attribute definition, or click an existing attribute definition to select it and then click **Edit**
  - b. In the **Attribute Definition** dialog box, pick an attribute type from the drop down, and enter a **Name** and (optionally) a **Description** for the attribute.
  - c. You can set one or more default values for the attribute in the **Default Values** section. To set more than one default value, you must select the **Can have more than one value** check box. (This check box is only visible for data types that support multiple values.)
  - d. For some data types, you can set a minimum value, maximum value, or both. Enter these in the **Minimum Value** and **Maximum Value** sections.
  - e. For some data types, you can set one or more allowed values. Set these in the **Allowed Values** section.
  - f. When you have finished setting the parameters of the new attribute definition, click **OK**. The new attribute definition is shown in the list on the **Attribute Definitions** tab.
6. For each rule, on the Rule **Action Parameters** tab, you may add or modify one or more action parameters to the rule:
    - a. Click **Add** to add a new action parameter, or click an existing action parameter to select it
    - b. Enter or modify a name and a value for each new or existing action parameter
  7. When you are finished creating the new schema, click **Apply** to create it without closing the **New Schema** window, or click **Save and Close** to create the schema and close the window. Your new schema is listed on the **Schemas** tab of the **Policies** pane.

## Viewing Action Definitions

Policies invoke actions based on events and conditions. When you create or edit a rule, you must use one of these actions to define what Oracle Beehive should do when the rule event, and all conditions, are met. You can review the list of default actions.

To view the default action definitions, from the **Policies** pane, click the **Action Definitions** tab. Each action definition is listed, along with a description.

Click an action definition to display information about that action definition. In the lower pane, the **Name**, **Description**, **Type**, and **Action** string are displayed.

## Managing Roles

A *role* is tied to a role definition and can be used to assign a set of privileges to multiple users. Though Oracle Beehive comes with a predefined set of roles and role definitions, you can create your own roles and role definitions to suit the needs of your enterprise.

## Creating Role Definitions

A *role definition* is an Oracle Beehive entity that comprises access types and privileges for a given scope (enterprise, organization, team workspace, or personal workspace).

### To create a role definition:

1. From the **Enterprises** panel, click **Roles**.

2. If the scope for the role definition is your entire enterprise, proceed to step 3. If the scope for the role definition is an organization, team workspace, or personal workspace within your enterprise, perform the following steps:
  - a. Click the **Search** icon next to the **Scope** field.
  - b. Click the **View Organizations** icon to view a list of organizations within your enterprise. Alternatively, click the **View Workspaces** icon to view a list of team workspaces and personal workspaces within your enterprise.
  - c. Select an item from the list and click **Add**.

**Tip:** A *scope* is a section of the Oracle Beehive system such as an enterprise, organization, personal workspace, or team workspace. When you create a role definition, you define its scope, which determines the availability and access of the role definition. For example, a role definition created within the scope of a specific team workspace is only valid in that workspace.

3. Click the **Definitions** tab.
4. From the **New** menu, select **Definitions**.
5. In the **Name** field, enter a unique name for the role definition. In the **Description** field, enter a brief description for the role definition.
6. Select the **always enabled** check box to ensure that all roles referencing this role definition are enabled by default. If the **always enabled** check box is deselected, roles referencing this role definition are disabled by default, and must be enabled individually.
7. Using the options in the **Access types** section, select the operations that can be performed on Oracle Beehive entities in this role definition. You can grant access, deny access, or leave access undefined for each *access type*:
  - **All** sets every access type to **Granted** for the role definition.
  - **Read** allows the user to view or open an artifact.
  - **Write** allows the user to alter an artifact.
  - **Delete** allows the user to delete an artifact.
  - **Execute** allows the user to run executable artifacts, such as installers and applications.
  - **Discover** only allows the user to discover the existence of an artifact in searches, lists, and directories. It does not let the user view the contents of an artifact.

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**Note:** For more information, see [About Entities, Actors, and Artifacts](#).

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8. Click the **Privileges** tab.
9. Click **Add**.
10. Select a privilege from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple privileges, and click **Add**.

**Tip:** A *privilege* is the authority to perform a set of operations within the Oracle Beehive system. Some privileges apply only to specific services, while others apply to all services. For example, the **Calendar User** privilege allows the user to use the calendaring functionality in Oracle Beehive, while the **Login** privilege allows the user to sign in to Oracle Beehive.

11. Click **Save & Close** to create the role definition and close the **New Definition** window. Alternatively, click **Apply** to create the role definition without closing the window.

### Conceptualizing Role Definitions

When you decide to create a role definition, determine the needs you want fulfilled through the role definition in relation to your user base:

1. **Where in your enterprise is this role definition valid?** A role definition can be valid in a team workspace, in a personal workspace, in an organization, or across your entire enterprise. The logical area of effect for this role definition constitutes its *scope*.
2. **What services should be available for this role definition?** The type and number of accessible services constitute the *privileges* for the role definition.
3. **What operations can be performed on Oracle Beehive entities via this role definition?** The selected operations constitute the available *access types* for the role definition.

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**Note:** A role definition remains inactive until you associate it with a role.

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## Creating Roles

### To create a role:

1. Click **New**.
2. Enter a unique name for the role.
3. Click the search icon to access a list of role definitions. Select a role definition from the list. The selected role definition now appears in the **Definitions** field.
4. Optionally, enter a role description in the **Description** field.
5. Optionally, you can grant users, groups, or resources automatic access to this role by performing the following steps:
  - a. Depending on the type of entity to be granted access to the role, click the **Groups** tab, the **Users** tab, or the **Resources** tab.
  - b. Click **Add**.
  - c. Enter the full name or part of the name of a user, group, or resource in the **Search** field and click the magnifying glass to obtain a list of results.
  - d. Select an item from the list and click **Add**. Alternatively, hold down **Ctrl** to select multiple items, and click **Add**.
6. Click **Save & Close**.

## Modifying Roles

### To modify a role:

1. Select the role.
2. Modify the role as described in steps 2 through 5 of [Creating Roles](#).
3. Click **Apply** to save your changes.

## Managing Categories

Categories are a hierarchical structure of designations that may be applied to entities, including all of the artifacts stored in a workspace. Categories always exist at the enterprise scope.

## Managing Audit

Auditing is the act of capturing and evaluating historical records of system events to assess system performance, track user activities, and identify issues, among other goals. The results of effective auditing include timely and informed decisions and actions, especially when resolving security threats or preventing them from occurring. For more detailed information, see "Managing Auditing Policies" in the "Managing Oracle Beehive Events, and Policies" module of the *Oracle Beehive Administrator's Guide*.

To access the main Audit view, click **Audit** in the **Enterprises** panel.

On the Audit pane, the three primary tabs are **Repository**, **Trails**, and **Policies**. The primary tabs are rendered depending on the role(s) granted to the user that is signed in. The **Policies** tab is rendered only if the signed in user has the 'Audit Administrator' role. Similarly, the **Repository** and **Trails** tabs are shown only if the signed in user has the 'Auditor' role. A user with both roles, or a user with full administrator privileges, will see all three tabs.

## Listing Audit Policies

You can list available audit policies by clicking the **Policies** tab in the main Audit view. (If you cannot see the **Policies** tab, you do not have sufficient privileges to manage audit policies.)

### To search for audit policies:

1. Click the **Policies** tab.
2. Enter a search string in the **Search** field. For more information, see [Performing Simple Searches](#).
3. Click the **Search** button.
4. Click the **Clear** button to reset the pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Creating Audit Policies

Creating an audit policy is exactly the same as creating any other policy. From the Audit pane, click the **Policies** tab. Then, follow the instructions found in [Creating a New Policy](#).

## Modifying Audit Policies

To modify any audit policy you have created, click the audit policy in the main Audit view. You can either edit the details of the policy in the lower pane, or from the **Action** menu, click **Open** to edit the audit policy in a new window. Follow the steps described in [Modifying a Policy](#) to modify the various audit policy details.

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**Note:** Once an audit policy has been created with one or more Rules, you cannot change the base template on which the policy was created. If you want to make a policy using a different base template, you must create a new audit policy.

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## Deleting Audit Policies

You can delete any audit policy you have created by selecting the audit policy in the main Audit view and clicking **Delete** from the menu bar. To delete multiple audit policies at once, hold down **Ctrl** while making your selections. You will be prompted to confirm the deletion or deletions.

## Searching the Audit Repository

The Audit Repository contains all audited events. Auditors can search the repository for specific records and create audit trails from the search results. For more information, see [Creating Audit Trails](#).

### To search the audit repository for records:

1. In the main Audit view, click the **Repository** tab.
2. Enter a search string in the **Search** field. For more information, see [Performing Simple Searches](#). The following attributes are available for searching:

**Table 3–1 Audit Record Search Attributes**

Search Attribute	Match Type	Description
Actor	exact	The identifier of the actor (user) that caused the audit event(s)
ActorName	contains	The name of the actor that caused the audited event(s)
Event	contains	The audit event name
DateRange	between start and end dates	The date range in which the audited event(s) occurred
Scope	exact	The identifier of the audited entity's parent container. For example, the workspace in which a document is stored. If Scope is not specified, the search defaults to the Enterprise container
Audited Entity ID	exact	The CollabId of the audited entity. You must enter the complete CollabId string
Client IP Address	contains	The IP address of the client that triggered the audit event
Client Name	contains	The client application name that triggered the audit event
Client Type	contains	The client type that triggered the audit event

3. Click the **Search** button. Your search results appear in the main window.

4. Click the **Clear** button to reset the pane and repeat the search with a new string. Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Listing Audit Records

When you click the **Repository** tab in the main Audit view, you will see a list of audit records. Clicking an [audit record](#) brings up information about the record in the Details pane. Because audit records cannot be modified, they appear as read-only in the display.

## Listing Audit Trails

When you click the **Trails** tab in the main Audit view, you will see a list of audit trails. The attributes for each [audit trail](#) are listed in the appropriate column:

- **Name** (name)
- **Description** (description)
- **Record Count**: Lists the number of records in the audit trail.
- **Modified On**: Lists a date/time stamp indicating when the trail was last updated.
- **Index**: An integer is assigned to each audit trail in order, for your convenience. (This column is not shown by default.)

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**Note:** Each parenthetical value represents the equivalent search attribute for the associated audit trail attribute. For more information, see [Searching for Audit Trails](#) and [Performing Simple Searches](#).

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## Creating Audit Trails

To create an [audit trail](#):

1. From the **Trails** tab of the Audit pane, click **New**. The **New Audit Trail** window opens.
2. Enter a **Name** and, optionally, a **Description** for the new audit trail.
3. You can add one or more audit records. Click the **Audit Records** tab. Click **Add**. The **Audit Record Picker** opens:
  - a. Scroll down the list of audit records, or use the search function to find audit records.
  - b. Select one or more records and click **Add** to add them. The **Audit Record Picker** closes, and your chosen records are added to the **Audit Records** list.
4. Click **Save & Close** to create your audit trail.

## Modifying Audit Trails

You can modify any audit trail you have created by selecting the audit trail in the main Audit view. The audit trail details are shown in the lower pane. Make your desired changes and click **Apply** to apply them to the existing audit trail.

Alternatively, you can select an audit trail and click **Open** from the **Actions** menu, to edit the audit trail in a separate window. Then, follow the procedure in [Creating Audit Trails](#).

## Deleting Audit Trails

You can delete any audit trail you have created by selecting the audit trail in the main Audit view and clicking **Delete** from the menu bar. To delete multiple audit trails at once, hold down **Ctrl** while making your selections. You will be prompted to confirm the deletion or deletions.

## Exporting Audit Trails

You can export an audit trail in XML format by selecting the audit trail in the main Audit view and clicking **Export** from the menu bar. You will be prompted to provide a file name and a directory path for the export.

## Searching for Audit Trails

You can search the system for audit trails.

### To search the system for audit trails:

1. In the main Audit view, click the **Trails** tab.
2. Enter a search string in the **Search** field. For more information, see [Performing Simple Searches](#).
3. Click the **Search** button.
4. Click the **Clear** button to reset the pane and repeat the search with a new string.

Alternatively, perform an advanced search by following the steps described in [Performing Advanced Searches](#).

## Managing Remote Repositories

Oracle Beehive allows you to grant access to remote content repositories using Oracle Universal Content Repository (UCM). You can add and configure UCM repositories using Oracle Beekeeper.

To manage remote repositories, from the **Enterprises** menu, click **Remote Repositories**.

Remote repositories are created at some level of scope within your enterprise. Click the **Scope** icon above the remote repositories menu, and select a level of scope to view remote repositories for that level of scope.

## Creating and Modifying Remote Repositories

1. To create a new remote repository, from the **Remote Repositories** pane, make sure you are at the desired level of scope, and then click **New**.

To modify an existing remote repository, select the remote repository from the list. You can modify the remote repository's attributes in the lower pane, or, from the **Action** menu click **Open** to open it for editing in a new window.

2. From the **General** tab, enter a **Name** and, optionally, a **Description** for the remote repository. From the Type drop down, select **Oracle UCM**.

If you are creating a new remote repository, click **Next**. If you are modifying an existing remote repository, click the **Attribute Templates** tab.

3. The Attribute Templates shows the attributes used to connect to your remote repository. Make sure the attribute values are set to the correct parameters to



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connect to your **Oracle UCM** instance. To modify an attribute, select its row in the table and click **Edit**:

- a. The **Cannot be changed**, **Mandatory**, and **Prompt users for a value** selections are not applicable for remote repository attributes; do not make changes to these check boxes.
  - b. Set a value for the attribute in the **Default Values** section. Do not select the **Can have more than one value** check box. (This check box is only visible for data types that support multiple values.)
  - c. Do not make changes to the **Minimum Value** and **Maximum Value** sections, if shown.
  - d. Do not make changes to the **Allowed Values** section, if shown.
  - e. When you have finished setting the value for the attribute, click **OK**. The new attribute value is shown in the **Attribute Templates** list.
4. If you are modifying the remote repository configuration in the lower pane, click **Apply** to apply your changes. If you are creating a new remote repository, or modifying an existing remote repository configuration in a separate window, click **Apply** to apply your changes without closing the window, or click **Save & Close** to apply your changes and close the window.

## Deleting Remote Repositories

To delete a remote repository, from the **Remote Repositories** pane, make sure you are at the desired level of scope. Select the remote repository in the list, and click **Delete**.



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## Managing Services

This module provides an overview of the different services that administrators can manage using Oracle Beekeeper.

### Accessing Services

To access a service, click it in the **Services** pane on the bottom-left side of the window. To view the current configuration of the service, click the **Configuration** tab. To view metrics for a service, click the **Metrics** tab. To view logs for a service, click the **Logs** tab.

### Modifying Services

When you modify a service, you save a change or a series of changes as a *proposed configuration*. To apply your changes, you must validate and activate your proposed configuration. For more information, see [Proposed Configuration](#) and [Active Configuration](#).

#### To modify a service:

1. Select the service in the **Services** pane on the bottom-left side of the window.
2. Click the **Configuration** tab.
3. Click **Edit**.

A window opens showing all of the configurable parameters and their current values

4. Modify the values for any of the parameters.
5. Click **Save & Close** to store your proposed changes.

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**Note:** The main window for each service only displays the active configuration for the service. Therefore, when you modify a service, your changes will not appear in the main window until you validate and activate your proposed configuration.

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6. If you made changes to a parameter of the Authentication Service included in the following list, you must run `beectl modify_local_configuration_files` after saving your changes. Until you do so, the changes will not be active in the system.

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**Caution:** The `beectl modify_local_configuration_files` command may restart various affected components of Oracle Beehive.

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- AuthStoreType
- JsoSessionTimeout
- LoginAttempts
- LockoutTime
- OssoConfigFile
- SsoLogoutUrl
- SsoType
- UseJazn
- UseSecureCookie
- WnaEnabled
- WnaKeytab
- WnaPrincipal
- WsSecurityExpiry
- WsSecuritySamlEnabled
- WsSecuritySigKeyAlias
- WsSecuritySigKeyPwd

## Enabling and Disabling Services and Service Instances

You can set a service or service instance to be disabled. A disabled service or service instance will not start when Oracle Beehive is started. To start such a service, you must first enable it, and then start the service (or restart Oracle Beehive).

Many services are essential to the normal operation of Oracle Beehive, and therefore should not be disabled. To avoid system errors or a service outage, you should only disable a service if advised to do so by Oracle documentation or an Oracle service representative.

To enable or disable a service or service instance:

1. Click the name a service in the **Services** list. From the service pane, you can select a service instance from the **Go to** drop down list at the top of the pane.

Or, from the **Topology** module, navigate to a service or service instance, select it in the list, and from the **View** menu, click **Configuration**.

2. In the service pane, click the **Configuration** tab.
3. Click **Edit**. A new window opens, showing the service configuration parameters.
4. In the new window, click the **Advanced** link to show the advanced options.
5. Select **Enabled** or **Disabled** from the Status drop down list.
6. Click **Apply** to apply the change to the proposed configuration and leave the window open, or click **Save & Close** to apply the change and close the window.

7. You must activate your proposed configuration to apply your change. See [Active Configuration](#) for details.

## Comparing Service Configuration Versions

From any Service view, you can compare current and prior configurations and proposed configurations, to see which service properties may have been changed. To compare configurations:

1. Click on any service. To compare a service instance configuration, use the **Go to** drop down list to navigate to the service instance.
2. On the **Configuration** tab, click **Compare**. The **Compare Configuration Versions** window opens.
3. Using the drop down boxes, select a **Baseline Version** and an **Other Version** to compare to it. Click **Compare**. In the lower pane, any differences between the two configuration versions are shown.
4. When you are done reviewing the changes, close the **Compare Configuration Versions** window.

## Services

**See Also:** For descriptions of the service properties, please consult "Oracle Beehive Property Reference" in the *Oracle Beehive Administrator's Reference Guide*.

This section describes the services you can manage through Oracle Beekeeper:

- [Access Control](#)
- [Alarm](#)
- [Audit](#)
- [Authentication](#)
- [BeeCentral](#)
- [Beehive Conferencing](#)
- [CalDAV](#)
- [Client Management](#)
- [Coexistence](#)
- [Conference](#)
- [Device Management](#)
- [Discussions](#)
- [Email](#)
- [Event](#)
- [Fax Message](#)
- [FTP](#)
- [Identity Provider](#)
- [Instant Message \(IM\)](#)

- Management
- Mobile Data Sync (OMA)
- Mobile Device Management (Mobile DM)
- Mobile Instant Message (MIM)
- Mobile Mail
- Mobile Push
- Notification Delivery
- Platform
- Policy
- Presence
- Records Management
- Resource Directory
- Remote Content
- Search
- SES Endpoint
- SMPP Delivery
- Subscription
- Syndication
- Team Collaboration
- Time Management
- Time Zone
- Transcoding
- User Directory
- Voice Message
- WebDAV
- Wiki
- Workspace
- XMPP
- Zimbra Connector
- Zimbra User Interface (UI)

## Access Control

The Access Control Service manages how users are permitted to access (view, use, and manipulate) entities in Oracle Beehive, such as files, workspaces, client services, and shared resources.

## Alarm

The Alarm Service handles all time management-related alerts for the system, and enables users to configure and receive alerts such as reminders prior to meeting start

times. The Alarm Service is also responsible for signaling the activation of other services at pre-configured times.

## Audit

The Audit Service is the service interface to the Oracle Beehive Audit Framework, which supports and manages all aspects of auditing for system and business events, and policies.

## Authentication

The Authentication Services manage all aspects of user authentication for Oracle Beehive, including single sign-on (SSO), user repository authentication, authentication policies, and encryption.

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**Caution:** After making changes to certain security-related parameters, and applying your changes, you must also run the `beectl modify_local_configuration_files` command on the command-line. Until you do so, your changes will not be active. See ["Modifying Services"](#) for a complete list of affected parameters.

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## BeeCentral

The BeeCentral Service manages Oracle Beehive Central; the Web page provided for Oracle Beehive users, primarily for downloading clients and updates.

## Beehive Conferencing

The Beehive Conferencing Service provides connectivity for Oracle Beehive Conferencing online meetings. You can designate locations for the Windows and Apple Macintosh client software, if you do not want to use the default locations (accessible from the Oracle Beehive Central client download page).

## CalDAV

The CalDAV Service manages all time management-related features and settings that the system leverages using the Calendaring Extensions to WebDAV (CalDAV) protocol, including:

- Session cache settings, such as the maximum number of entries allowed in the authentication token table and the length of time (in seconds) an authentication token is valid
- Directory cache settings, such as the maximum number of entries allowed in the directory cache and the length of time (in seconds) an entry is valid
- Collection-related settings, such as whether or not browsing on collections is enabled and the default media type for collections if none is specified in client requests

## Client Management

The Client Management Service allows you to manage client software settings related to client connections, notification thresholds, and debugging.

Using the Client Management Service, you can:

- Set session timeout values
- Enable trace logs and debug mode
- Set the node address on which to listen for incoming client requests
- Set the maximum number of pending notifications the Client Management Service will hold for supported clients
- Suspend the threshold for the client notifications queue

## Coexistence

The Coexistence Service enables organizations to integrate Microsoft Exchange Server 2003 with Oracle Beehive for maximum interoperability.

## Conference

The Conference Artifact Service enables Web conferencing capabilities including video, voice, text, instant messaging, and desktop sharing.

## Device Management

The Device Management Service enables you to manage supported client software such as Oracle Beehive Integration for Outlook, installed on end-user computers, and mobile devices.

## Discussions

The Discussions Service enables organizations to host threaded, online discussion forums in which users can browse message boards, and post and respond to messages.

Using the Discussions Service, you can:

- Set policy- and security-based filters including anti-spam capabilities
- Use predefined roles (moderator, reader, contributor, editor)
- Control permissions for users and groups
- Allow programmatic access through Web Services

## Email

The Email Service supports all aspects of e-mail creation, delivery, and management for Oracle Beehive.

**See Also:** For extensive documentation about how to manage and configure e-mail using Oracle Beekeeper, see Chapter 8, "Managing Oracle Beehive E-mail," in the *Oracle Beehive Administrator's Guide*

## Event

The Events Service manages business events and related configuration settings, including:

- Handling requests from the Subscription Service regarding subscriptions on business events
- Setting the log level for business events processing



- Specifying the number of times the system should retry failed actions that result from business events

## Fax Message

The Fax Message Service enables forwarding of fax messages from the Cisco Call Manager to Oracle Beehive users, as e-mail attachments.

## FTP

The FTP Service supports and manages all content management-related features and settings that the system leverages through FTP and FTP over TLS, including:

- Support for FTP clients such as CuteFTP, WS\_FTP, and SmartFTP
- Whether or not the specified FTP server is enabled for Oracle Beehive
- The port number at which the FTP Service will listen for requests
- The maximum number of ports the FTP Service can use for passive listening
- The buffer size between streams during content uploads
- The length of time (in seconds) the service will allow a user session to remain inactive before timing out

## Identity Provider

The Identity Provider Service provides certificate authority features for Oracle Beehive, enabling the system to manage digital certificates and other related security credentials.

## Instant Message (IM)

The Instant Message Service provides core instant messaging features, including:

- Message encryption
- Rosters (buddy lists) based on Oracle Beehive address books and People lists
- Presence support (provided by the Presence Service) with customizable status settings
- Offline capabilities such as sending an instant message through e-mail
- Server-side message transcripts

## Management

The Management Service supports all aspects of system administration for Oracle Beehive.

Using the Management Service, you can:

- Configure system and infrastructure on the fly (host names, ports, connections, memory, and so on) and management (start, stop, refresh, and restart)
- Monitor performance and usage in real time
- Trace parameter configuration (including the ability to attach probes to transactions)
- Identify and examine errors in transactions

- Link trace errors to log records
- Manage logs
- Manage log files including rotation and disposition functions (parameter and qualifier definitions)
- Manage your log file repository (size management, truncation schedules)
- Integrate your Oracle Beehive system with Oracle Enterprise Manager Grid Control
- Remote monitoring through integration with existing Oracle and third-party system management tools and standardized protocols

### **Mobile Data Sync (OMA)**

The Mobile Data Sync Service provides for automatic synchronization of e-mail, calendar, task, and address book data on mobile devices.

### **Mobile Device Management (Mobile DM)**

The Mobile Device Management Service manages the communications and configuration settings for the Mobile Device Management Server, which enables connections between the Device Management Service and supported device-resident Mobile Device Management clients.

### **Mobile Instant Message (MIM)**

The Mobile Instant Message service manages delivery of instant messages to and from mobile devices.

### **Mobile Mail**

The Mobile Mail Service provides a complete Push IMAP (P-IMAP) v0.6 implementation for real-time delivery of e-mail to users' mobile devices. The service also manages the features and settings related to push mail, including:

- The maximum number of concurrent users the Mobile Mail Service will allow
- The maximum number of e-mail messages the Mobile Mail Service will allow in each user's mobile device inbox
- The number of invalid login attempts the Mobile Mail Service will allow each mobile user to make before closing a connection
- Whether or not connections to the specified IMAP server are enabled

### **Mobile Push**

The Mobile Push Service is responsible for delivering notifications to Push clients running on end users' mobile devices. It is, in essence, an event dispatcher for those devices. For example, Mobile Push Service alerts can indicate changes in users' inboxes, calendars, task lists, and address books. Alerts can also prompt users to take action on corresponding device management events.

Additionally, the Mobile Push Service manages the following features and settings:

- The Internet-accessible address, port number range, and type of listener for the Mobile Push Server

- Supported types include HTTP, TCP, and the Oracle Beehive Transport Infrastructure (BTI)
- The length of time (in minutes) of inactivity the service will allow before terminating an unauthenticated session
- The maximum number of concurrent connections the Mobile Push Service will allow
- The number of invalid login attempts the Mobile Push Service will allow before closing a connection

## Notification Delivery

The Notification Delivery Service is responsible for the delivery of event notifications. Message delivery can be accomplished through e-mail, instant messages, and Simple Message Service (SMS). The service also allows users to schedule when such notifications should be delivered or temporarily block them altogether.

## Platform

The Platform Service enables organizations to leverage the Oracle Beehive platform and its APIs, and support integration and coexistence with third-party components, Web services, and custom solutions.

## Policy

The Policy Service enables organizations to centrally apply, manage, and store business logic for Oracle Beehive events. A policy is a set of server-side rules that defines what actions the system must take when one or more events occur. Policies can apply to any Oracle Beehive entity, including users, artifacts, services, and workspaces. The Policy Service leverages the Oracle Beehive Event Framework, and also provides the following key features:

- Policy and policy schema extensibility
- Inheritance model that supports enterprise-level policies with exceptions and extensions for specified groups, levels, and entities
- Policy templates that enable you to define the extensible characteristics of policies and the business rules that they contain

## Presence

The Presence Service supports and manages all aspects of user and resource presence for Oracle Beehive. Presence is the ability to detect and identify the status of a user or resource, and then display that status to other users and resources in one or more clients or applications.

## Records Management

The Records Management Service supports all aspects of records management of documents and e-mail for Oracle Beehive through integration with Oracle Universal Records Management (URM). Oracle URM enables you to manage records and retention policies, disposition processes, and litigation holds or freezes in a central repository, or Universal Records Management (URM) server. You can then apply policies, dispositions, and holds to content stored in other systems, such as Oracle Beehive. Although the records associated with e-mail and documents are managed by

Oracle URM, the artifacts themselves are stored and maintained in the Oracle Beehive content repository.

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**Note:** Oracle URM is a separate product not included with Oracle Beehive. For more information about using Records Management with Oracle Beehive, see "Managing Records Management" in Chapter 6, "Managing Oracle Beehive Workspaces" of the *Oracle Beehive Administrator's Guide*.

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## Resource Directory

The Resource Directory Service provides a common definition for all Oracle Beehive resources and a centralized location to access and manage resource entries. The Resource Directory Service manages all aspects of the resources provided in Oracle Beehive directories, enabling users to view and schedule resources through supported time management features. This includes related settings such as the total number of resources returned in search results.

## Remote Content

The Remote Content Service provides connectivity to remote repositories using Oracle Universal Content Repository (UCM).

## Search

The Search Service supports and manages all aspects of user-initiated, text-based searches for Oracle Beehive.

## SES Endpoint

The SES Endpoint Service provides connectivity to Oracle Secure Enterprise Search.

## SMPP Delivery

The SMPP Delivery Service provides Short Message Peer-to-Peer (SMPP) connectivity to other Oracle Beehive services, particularly mobility services.

## Subscription

The Subscription Service handles all aspects of subscription logic for Oracle Beehive subscriptions.

## Syndication

The Syndication Service provides Really Simple Syndication (RSS) feed subscription capability to Oracle Beehive users.

## Team Collaboration

The Team Collaboration Service provides much of the functionality for the Oracle Beehive Workspaces client.

## Time Management

The Time Management Service provides the coordination services for the core aspects of Oracle Beehive calendars, scheduling, task management, and reminders. This includes support for multiple calendars and task lists in workspaces, automatic updates of group-based invitations and task assignments resulting from group definition changes.

## Time Zone

The Time Zone Service supports and manages all aspects of synchronizing user schedules and calendar entries across global time zones. The Time Zone Service unifies the coordination of all time zone-related components and activities in Oracle Beehive.

## Transcoding

The Transcoding Service supports and manages all the data and audio conversions for Oracle Beehive voice and Web conferences.

## User Directory

The User Directory Service manages all aspects of user directory management for Oracle Beehive and supports a variety of implementations including local storage of users and groups as well as integrations with existing Oracle and third-party user directories.

Other key user directory management features provided by the User Directory Service include:

- Support for National Language Support (NLS) user aliases
- Customizable user attribute fields
- Attribute mapping with existing user directories
- User creation through pre-defined templates
- Import capabilities of directory data based on Extensible Markup Language (XML) files
- Bulk user management functions such as creating, modifying, and deleting users

The User Directory Service supports integration with the following user directory servers:

- Oracle Internet Directory
- IBM Tivoli
- Microsoft Active Directory
- Sun Java System Directory Server

## Voice Message

The Voice Message Service supports all aspects of voicemail and fax management for Oracle Beehive. The Voice Message Service can be leveraged by the E-mail Service, enabling delivery of voicemail messages and faxes as e-mail. The Voice Message Service also supports multiple locations, including private branch exchanges (PBXs), and multiple languages, enabling enterprises to support a variety of network and user needs all within a single Oracle Beehive instance. Supported options include integration of existing telephony infrastructures with Oracle Beehive.

## WebDAV

The WebDAV Service supports and manages all content management-related features and settings that the system leverages over the Web-based Distributed Authoring and Versioning (WebDAV) protocol, including:

- Support for WebDAV clients
- Whether or not the specified WebDAV server is enabled for Oracle Beehive
- The default authentication scheme for WebDAV clients
- Length of time (in minutes) before browser-based and WebDAV-based client cookies expire
- The minimum value (in minutes) allowed for content locks
- Length of time (in minutes) before the system refreshes each active user's preferences
- The buffer size between streams during content uploads and downloads
- Shortcuts for content

## Wiki

The Wiki Service provides the Oracle Beehive Wiki functionality in the Oracle Beehive Workspaces client.

## Workspace

The Workspace Service supports all the features and functionality provided by Oracle Beehive personal and team workspaces. In addition to collaborating with other workspace members and managing their artifacts, the Workspace Service enables users to manage their own workspace environments. The Workspace Service provides XML-based templates that enable self-service workspace creation, including the configuration of workspace properties such as workspace name, description, and URLs, among others. The Workspace Service enables you to manage workspaces from the enterprise level by configuring settings such as soft and hard quotas for workspaces and groups.

## XMPP

The XMPP Service supports and manages all the features and settings that the system exposes through the Extensible Messaging and Presence Protocol (XMPP) v 0.9 and 1.0., including:

- Support for XMPP clients such as Pidgin (formerly Gaim), iChat, and Trillion Pro
- Multiple authentication methods
- The list of all supported messaging agents
- The port number at which all XMPP servers will communicate
- The port number at which the system will encrypt messages over Secure Sockets Layer (SSL)
- The default language for messages

**Zimbra Connector**

The Zimbra Connector Service communicates between the Oracle Beehive server and any deployed instances of Oracle Beehive Integration for Zimbra.

**Zimbra User Interface (UI)**

The Zimbra User Interface Service provides some of the custom functionality available through Oracle Beehive Webmail.





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## My Favorites

The My Favorites is a useful bookmark feature of Oracle Beekeeper. This chapter includes the following sections:

- [About My Favorites](#)
- [Listing Favorites](#)
- [Modifying a Favorite](#)
- [Deleting a Favorite](#)

### About My Favorites

The My Favorites feature allows administrators to bookmark their favorite functionality or modules. For instance, artifact management or system management.

You can access this feature by using the My Favorites option on the left-side of the page.

### Listing Favorites

To list your favorite bookmarks:

1. Click **My Favorites** on the left-side of the page.
2. From the shortcut menu, click **Manage Favorites**.
3. The list of favorites is displayed under the Favorites tab in the Preferences dialog box.

### Modifying a Favorite

To modify an existing favorite:

1. Click **My Favorites** on the left-side of the page.
2. From the shortcut menu, click **Manage Favorites**.
3. Select a favorite from the list of favorites.
4. In the Preferences dialog box, click the **Edit** icon.
5. The **Edit Favorite** dialog box is displayed. You can only edit the **Name** field.
6. Click **OK**.
7. Click **Apply** to apply the changes.
8. Click **Save & Close**.

## Deleting a Favorite

To delete an existing favorite:

1. Click **My Favorites** on the left-side of the page.
2. From the shortcut menu, click **Manage Favorites**.
3. Select a favorite from the list of favorites.
4. In the Preferences dialog box, click the **Delete** icon.
5. In the confirmation dialog box, click **OK** to confirm the delete operation.

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# Glossary

**audit policy**

Created from one audit template and one audit scope.

**audit record**

The stored immutable data of an audited event. Audit records are verifiable; their integrity can be tested at any time to ensure that they are accurate and unchanged from the time of their creation.

**audited event**

Any auditable event that is actively being audited.

**auditable event**

Generated by any activity in the Oracle Beehive system that is capable of being audited. Sending an e-mail, changing the state of a document, and changing a service configuration are all examples of auditable events.

**audit trail**

A selection of audit records that are related based on a given context. For example, the audit trail of a lost business transaction consists of all the related audit records (stored events) that led up to the problem.

**audit repository**

A secure, immutable storage space for audit records.

**audit scope**

The logical area of effect of an audit policy, defined as a hierarchy of artifact containers (organizations, workspaces, and folders).

**hard quota**

The maximum disk space allowed for a workspace, organization, or enterprise. Once the hard quota is reached, no further create or update operations will be allowed until the quota violation is resolved.

**soft quota**

The disk space limit at which a warning event is created. Essentially, reaching your soft quota triggers a warning that you are approaching your hard quota

